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**United States Patent** [19]**Payne et al.**[11] **Patent Number:** **5,715,314**[45] **Date of Patent:** **Feb. 3, 1998**[54] **NETWORK SALES SYSTEM**[75] **Inventors:** **Andrew C. Payne**, Lincoln; **Lawrence C. Stewart**, Burlington; **David J. Mackie**, Cambridge, all of Mass.[73] **Assignee:** **Open Market, Inc.**, Cambridge, Mass.[21] **Appl. No.:** **328,133**[22] **Filed:** **Oct. 24, 1994**[51] **Int. Cl.<sup>6</sup>** ..... **H04L 9/00**[52] **U.S. Cl.** ..... **380/24; 380/23; 380/25; 380/49; 380/50**[58] **Field of Search** ..... **380/4, 21, 23, 380/24, 25, 49, 50; 364/401, 406, 408, 284.4; 235/379, 380; 395/200.01, 200.02, 200.09, 925**[56] **References Cited****U.S. PATENT DOCUMENTS**

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A network-based sales system includes at least one buyer computer for operation by a user desiring to buy a product, at least one merchant computer, and at least one payment computer. The buyer computer, the merchant computer, and the payment computer are interconnected by a computer network. The buyer computer is programmed to receive a user request for purchasing a product, and to cause a payment message to be sent to the payment computer that comprises a product identifier identifying the product. The payment computer is programmed to receive the payment message, to cause an access message to be created that comprises the product identifier and an access message authenticator based on a cryptographic key, and to cause the access message to be sent to the merchant computer. The merchant computer is programmed to receive the access message, to verify the access message authenticator to ensure that the access message authenticator was created using the cryptographic key, and to cause the product to be sent to the user desiring to buy the product.

**48 Claims, 25 Drawing Sheets****Microfiche Appendix Included**  
(1 Microfiche, 34 Pages)